California Department of Health Services TB Control Branch



TB Outbreak Response Team

Mission Statement: For outbreaks and extended contact investigations, the goal of the TBCB is to provide high-quality, consistent, and rapid assistance to local health departments to halt ongoing tuberculosis transmission.

Background

As the incidence of tuberculosis (TB) declines, outbreaks of TB become more apparent against the background of fewer and fewer cases. TB outbreaks represent ongoing, uncontrolled disease transmission and often occur among vulnerable populations and within high-risk settings. Jails, prisons, shelters, hospitals, schools, and nursing homes are all sites where outbreaks of TB have occurred in California. In addition, other settings such as renal dialysis centers, churches, and worksites have been sites of extended contact investigations when large numbers of people have been exposed to an active TB case and there is potential for an outbreak. Since each TB outbreak represents a setback for TB elimination, the prevention, identification of and response to outbreaks is becoming an ever more important component of TB control.

Outbreak related efforts offer opportunities for improving tuberculosis control in California. Outbreak investigations may identify at-risk populations who should be targeted for screening and treatment of LTBI; high-risk settings where more surveillance, education, and infection control measures are needed; delays in diagnosis of TB by providers that require further educational interventions; or policy issues that should be addressed.

Purpose of the Outbreak Response Team

Some outbreaks can present challenges to TB control programs. Local health department staff must quickly mobilize a tremendous number of diverse resources to contain an outbreak. They must coordinate communications between many different

organizations and collect and manage large amounts of data. Media coverage and political issues may complicate the investigation and add to the workload. As a result, the TBCB has created the Outbreak Response Team (ORT) to provide assistance to local health departments when they do not have the resources to respond to an outbreak or extended contact investigation while still maintaining other necessary TB program functions.

Frequently asked questions:

1. Who is on the ORT and what services do they provide?

The Outbreak Response Team includes a nurse, physician, Public Health Advisor, epidemiologist and a Consulting Communicable Disease Representative. Technical assistance can be provided onsite or by telephone and can include any or all of the following services:

- Investigation planning/prioritization
- Medical consultation
- Case management consultation
- Field staff to conduct interviews, locate contacts, and provide access to hard to reach populations
- Data management and analysis
- Staff training
- Lab services
- Referrals for engineering and infection control consultation
- Liaison to community providers

The ORT can also provide samples of tools and forms used in other investigations, which can be modified to meet individual program needs.

2. What is a TB outbreak?

In general, an outbreak is defined as the occurrence of cases above the expected level, usually over a given period of time in a geographic area, facility, or within a specific population group.

When assessing whether a cluster of TB cases represents an outbreak, indicators to look for include:

- Epidemiological links between cases
- Similar unique characteristics among cases
- Matching drug resistance patterns of isolates
- Matching DNA fingerprint patterns of isolates

Outbreaks of special concern are MDR-TB outbreaks, outbreaks among immuno-compromised populations, children, or other vulnerable groups.

3. How do I report an outbreak?

California law requires local health departments to report TB outbreaks to the state health department within one week of recognition. When an outbreak is initially identified, it should be reported to the TBCB by phone using the number provided below. We also encourage health departments to notify the TBCB of any extended contact investigation in high-risk populations or congregate settings. Instructions for the initial notification of suspected outbreaks, and the follow-up reporting of confirmed outbreaks, can be found in the "Tuberculosis Outbreak Reporting Instructions" accompanying this Fact Sheet.

4. Whom do I call for assistance?

To request assistance for an outbreak or extended CI, the TB Controller or Program Manager should contact the TB Outbreak Duty Officer using the number listed below. Requests can be made at any time during an investigation, although in general it is optimal when the ORT is involved from the beginning of a response.

5. What will happen next?

Once a request is received, the ORT will arrange either a teleconference or meeting with the LHD to discuss: clinical features of the case(s); numbers of contacts; characteristics of the case(s) and exposed population; exposure setting; potential political or media involvement; and needs of the LHD. Based on this information, together the LHD and ORT will determine the type of help to be provided. Details of assistance activities will then be defined in an informal written work plan, which can be revised as needs change throughout the investigation.

Once assistance ends, a debriefing will be held between the ORT and LHD to summarize preliminary results and to discuss what worked well and what could have been improved in the investigation. Additionally, the LHD will be given the opportunity to evaluate ORT's performance and provide suggestions for improvement in future technical assistance activities. A final report detailing the investigation results and future recommendations will be prepared by the ORT and submitted to the LHD at the conclusion of an investigation.

6. Who will be in charge of the investigation?

The LHD is the lead agency in responding to outbreaks and extended contact investigations within its jurisdiction. The ORT will assist the LHD in an investigation, and each agency is responsible for overseeing its own staff's activities. Before ORT assistance begins, roles, responsibilities, and the general plan and priorities for the investigation will be defined.

For further information or to request assistance, contact: